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EXAMINER

PATEL, HARESH N

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,672

Applicant(s)

SLAUGHTER ET AL.

Examiner

Haresh Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 51-73 and 100-117 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3, 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-24, 51-73, 100-117, are presented for examination. Claims 25-50, 74-99, 118-135, have been cancelled.

Election/Restrictions

2. Applicant's election without traverse of the claims 1-24, 51-73, 100-117, of Group I in Paper No. 7 is acknowledged.

Priority

3. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. All the claimed terms are not disclosed in the provisional applications; hence, applicant does not benefit the effective date as the provisional priority dates.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Bridging between XML based distributed environment and Jini like environments using proxy service".

Drawings

5. New corrected drawings are required in this application because Figure 50 contains term "ervice", which is supposed to be "service". Figures 6, 8, 9, 13, 18-49B, contain term "space", which can be also interpreted as a blank area or any empty storage. Examiner requests to the

Art Unit: 2154

applicant to replace the term "space" with "JavaSpace", to enable any person skilled in the art to clearly understand the claimed subject matter. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Information Disclosure Statement

6. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 3 and 5, is attached to the instant Office action. Examiner makes a note that the IDS entry, paper no. 4, dated 8/16/2001, is missing the form PTO-1449. Hence, no reference was available from the IDS, paper no. 4. Examiner makes a request to the applicant to submit the form PTO-1449 for the IDS, paper no. 4. Also, examiner makes a request to the applicant to submit the complete cited publication "XML and Jini – On Using XML and the 'Java Border Service Architecture' to integrate mobile devices into the Java Intelligent Network Infrastructure", Stefan Muller – Wilken, Daniel Hinz, Winfried Lamersdorf.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2154

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-5, 19-21, 23, 24, 51-55, 68-70, 72, 73, 100-103, 113, 114, 116 and 117, are rejected under 35 U.S.C. 102(e) as being anticipated by Tuatini, "Shared service functionality invocation", U.S. Publication no. 2002/0032783, March 14, 2002.

9. As per claims 1, 51 and 100, Tuatini teaches the following:

a method for bridging a first computing environment based upon a message passing model to a second computing environment (e.g., heterogeneous distributed environment, figure 1), comprising,

a distributed computing system (e.g., heterogeneous distributed environment, figure 1), comprising,

a carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

a first entity (e.g., client, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160) in the first computing environment accessing a proxy service (e.g., Messaging component, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160) through messages in a data representation language (e.g., XML message, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160);

the proxy service providing to the first entity an interface to a second entity in the second computing environment (e.g., Messaging component providing client computer to communicate with CORBA server or Web server, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160); and

the first entity accessing the second entity in the second computing environment through the interface provided by the proxy service (e.g., Client computer communicating CORBA server or Web server through Messaging component, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160)

a first device in a first computing environment, based upon a message passing model (e.g., client using XML message, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160),

a second device in a second computing environment not based upon the message passing model of the first environment (e.g., CORBA server or Web server using other than XML messages, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

10. As per claims 2, 52, 101, Tuatini teaches the following:

the interface provides a data representation language messaging channel between the proxy service and the first entity in the first computing environment (e.g., XML messaging mechanism between client and the messaging component, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160), and wherein the interface further provides a communications channel between the proxy service and the second entity in the second computing environment (e.g., Messaging component providing messaging mechanism between CORBA server or Web server and the messaging component, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

11. As per claims 3, 53, Tuatini teaches the following:

the first entity is a client in the first computing environment (e.g., client, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160), wherein the second entity is a service accessible

Art Unit: 2154

through the second computing environment (e.g., Messaging component providing client computer to communicate with services of CORBA server or Web server, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160), and wherein the interface provided by the proxy service enables the first entity to access resources provided by the second entity to clients in the second environment (e.g., Messaging component providing client computer to communicate with services of CORBA server or Web server, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

12. As per claims 4, 54, 102, Tuatini teaches the following:

the proxy service providing to the first entity the interface to the second entity in the second computing environment comprises locating the second entity among a plurality of services accessible through the second computing environment (e.g., Messaging component providing client computer to communicate with a particular service from several services of CORBA server or Web server, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

13. As per claims 5, 55, 103, Tuatini teaches the following:

determining that the second entity includes information identifying the entity as a service accessible by entities in the first environment through proxy service interfaces to the second computing environment (e.g., Messaging component providing client computer to communicate with a particular service from several services of CORBA server or Web server, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

Art Unit: 2154

14. As per claims 19, 68, Tuatini teaches the following:

wherein the second environment is a message-based environment using a different language for messages than the data representation language used for messages in the first environment (e.g., CORBA server or Web server using message based languages other than XML, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

15. As per claims 20, 69, 113, Tuatini teaches the following:

the second environment is a non-message based environment (e.g., CORBA server or Web server using other than message based languages, figure 41, col., 14, paragraph 122 – col., 20, paragraph 160).

16. As per claims 21, 70, 114, Tuatini teaches the following:

communication among entities in the second environment uses remote method invocation (RMI) (e.g., RMI, col., 15, paragraph, 134).

17. As per claims 23, 72, 116, Tuatini teaches the following:

the second environment is an enterprise computing environment, wherein the second entity is an enterprise service accessible through the enterprise computing environment (e.g., an Enterprise Information System application such as on a legacy ERP system, col., 16, paragraph, 137).

18. As per claims 24, 73, 117, Tuatini teaches the following:

Art Unit: 2154

wherein the data representation language is eXtensible Markup Language (XML) (e.g., a client computer may provide requests using an HTTP protocol or in an HTML format, whereas an action handler may be developed to process requests using the XML format or protocol, col. 3, paragraph 60).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 6-18, 56-67, 104-112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuatini in view of Beck et. al. 6,604,140 (Hereafter Beck) and in further view of Murphy et. al. 6,604, 127 (Hereinafter Murphy).

21. As per claims 6-12, 56-61, 104-109, Tuatini teaches the claimed limitations of claims 1 and 3 as mentioned above and including the following:

providing an advertisement for the second entity, wherein the advertisement for the second entity includes access information for accessing the second entity in the second environment from the first environment, java language, proxy services, client method gate, generating of result data (e.g., In the illustrated embodiment, a single entity provides shared services and clients within an intranet 3900. These intranet components may interact with each other, and may also provide functionality (e.g., e-commerce functionality) to shared services and

Art Unit: 2154

clients outside the intranet, such as those of consumers or other businesses (e.g., customers and suppliers in a business supply chain). The illustrated shared services thus include shared services 3910 located within the intranet and one or more external shared services 3915 located outside the intranet (e.g., supplier shared services). Similarly, the clients can include clients 3925 outside the intranet (e.g., corporate customers) as well as clients 3920 within the intranet, col., 13 paragraph, 115).

Tuatini does not specifically mention about use of advertisement. However, the concept of providing an commercial information for the second entity including the commercial access information for accessing the second entity in the second environment from the first environment has been clearly disclosed by Tuatini and it is also well known in the prior art, for example, Beck, discloses the use of advertisement (e.g., Middleware enables a device to discover, advertise and use services. This enables software clients on the same device to share a service implementation (in the case of a local service) or to share an implementation proxy (in the case of a remote service), figure 1, abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tuatini and Beck because Beck's use of advertisement would facilitate a client to access the advertisement related information from the remote servers through the proxy services. The client will be able to access details of the advertisements from the remote computers of the other networks, as suggested by Beck.

Tuatini and Beck do not specifically mention about use of Java Space. However, the concept of using Java space to generate and manage the advertisements it is also well known in the prior art, for example, Murphy, discloses the use of Java space (e.g., The Java space 222 is

Art Unit: 2154

an object repository used by programs within the exemplary distributed system 100 to store objects. Programs use the Java space 222 to store objects persistently as well as to make them accessible to other devices within the exemplary distributed system. Java spaces are described in greater detail in co-pending U.S. patent application Ser. No. 08/971,529, entitled "Database System Employing Polymorphic Entry and Entry Matching," assigned to a common assignee, filed on Nov. 17, 1997, which is incorporated herein by reference. One skilled in the art will appreciate that the exemplary distributed system 100 may contain many lookup services, discovery servers, and Java spaces, col., 6, lines 55 – 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tuatini and Beck and Murphy because Murphy's use of Java space would provide persistent storage. Java space will help store the advertisements to publish and allow the client to access advertisements from every location where the advertisement related information is stored, i.e., to handle minor details of claims 6-12, 56-61, 104-109. A client will be able to access the advertisement related information from the remote servers through the proxy services, as suggested by Murphy.

22. As per claims 13-18, 62-67, 110-112, refer to the claims 6-12, 56-61, 104-109 for rejection and combination of references.

23. Claims 22, 71, 115, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuatini view of applicant's admitted prior art (AAPA).

24. As per claims 22, 71, 115, Tuatini do not specifically mention about Jini environment.

Art Unit: 2154

AAPA teaches the following:

the second environment is a Jini environment (e.g., Jini environment, pages 2-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tuatini and AAPA because AAPA's use of Jini environment would provide access to the Jini services. A client will be able to access the advertisement related information from the remote servers of the Jini network through the proxy services, as suggested by AAPA.

Conclusion

25. Examiner makes a note that the claims contain term "space", which can be also interpreted as a blank area. Examiner requests to the applicant to replace the term "space" with "JavaSpace", to enable any person skilled in the art to clearly understand the claimed subject matter. Even though, the applicant explained rationale for the invention, i.e., pages 8-14, contains key terms like, CORBA, Java RMI, XML, Java, JavaSpace, Jini, advertisement, etc., the independent claims do not reflect this. The specification should not contain hyperlinks to the Internet web sites.

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The

Art Unit: 2154

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

March 15, 2004


ZARNI MAUNG
PRIMARY EXAMINER